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# THE TRAINING SCHOOL BULLETIN

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# THE TRAINING SCHOOL BULLETIN

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3. Book reviews and news notes.
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# THE RUTGERS DRAWING TEST

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Drawing has been recognized in a wide variety of ways as an avenue of human expression. In the picture writing of primitive man and the great masterpieces of art in all ages, it has been found to offer a particularly fertile avenue through which children express themselves in ideas and in achievement.

A drawing itself is a recording of a bit of behavior which lends itself to comparison, analysis, and interpretation, both objective and definite as well as subjective. Many psychologists have used drawing as a test medium, whether as silent speech, copying, or in creative imagination. A child draws. One observes his poise, his stress, his rejection, his correction, the quality of line and proportion, the accuracy of form. When he is finished, one has a permanent record of a response, definite, precise and available for later study. With the growing appreciation that behavior expresses both ability and personality factors, such recorded patterns offer a particularly rich field of research.

The Rutgers Drawing Test has had a long period of incubation. In 1931, the first results were reported as tentative norms of one hundred preschool children copying simple geometric figures (10). In 1937, Stevens submitted a continuation study of 555 children (age range 4.0 thru 6.9 yrs.) copying a series of fourteen figures (11). Since then further studies have been carried out with a total of some 3,000 protocols available. From time to time, various smaller studies have been made exploring how well mentally deficient adults and children score on drawing tests. Another such peripheral study was made of a group of Negro nursery school children, resulting in no indication of racial differences. More recently, a rescoring was done of all the normal cases in order to extend the spread of scoring values in the upper age range beyond the entrance to school.

Copying a geometric figure has been a familiar subtest within several batteries, but a test made up solely of copying a series of such figures of increasing complexity is unique. One of the first goals of

the Rutgers Drawing Test was to choose and arrange the figures in increasing difficulty. Since the object of the test was to supplement the verbal tests already available for use in determining ability, with preschool and kindergarten children and not to measure practice effect or learning, only one attempt to copy was required. In assembling the figure series, isolated standardizations had been made whereby single figures had been placed in batteries. These served as guide posts.

Gesell (4) placed drawing in the motor development areas. Not before twelve months do many children do any drawing other than random movement. Perhaps here, at about the beginning of the child's second year, enough spontaneous scribbling is seen to suggest that the "evolution of drawing begins here". At two years most children can make a stroke or line as distinguished from scribbling. Horizontal strokes are more difficult to imitate or copy than are vertical ones. Gesell found children at three years could distinguish between vertical and horizontal lines, and could copy a circle from a model. At four, a child could copy the St. Andrews Cross, +, but not the Cross of St. George, ×. At five, the average child copies the square and triangle, but not the diamond.

Hildreth (7) found that the most rapid growth in drawing occurs within the first three drawing years, 2 through 4. Most children tend to make a rough circle as the first figure beyond the scribble stage.

A further summary of age levels at which various investigators have placed the copying of figures is given in Table I.

TABLE I

Age at which earlier investigators found certain figures could be drawn

| FIGURE | AGE | INVESTIGATOR |
|---|---|---|
| Vertical Line | 2 | Gesell (4), Starr (10), Stevens (11) |
| | 3 | Terman-Merrill (13) |
| Circle | 3 | Stutsman (12), Hildreth (7), Gesell (4), Starr (10), Terman-Merrill (13) |
| Square | 4 | Terman (13), Gesell (4), Kuhlman (8), Yerkes (17) |
| Diamond | 7 | Binet (2), Terman-Merrill (13), Kuhlman (8) |

The facts that drawing horizontal lines has been consistently found more difficult than the vertical, that the criss-cross is harder than the plus-sign cross, that one is four years old when he can draw a square and seven when he masters the oblique angles of a diamond, indicate a consistent pattern of development reflected in copying geometric figures and hence would seem to indicate their usefulness as test media.

Through public school, kindergarten, and first year classes, research was done on a number of figures in order to have a sufficiently long series to be reliably discriminative. Fourteen figures were finally chosen, drawn to scale, and arranged in order of difficulty with ample space beneath each figure for the child's copy.

The practice figures were the vertical and horizontal lines. The following figures make up the series: cross, circle, square, square with extended sides, oblique cross, Indian swastika, triangle, baseball, block cross, straight line star, diamond, double rectangle, interlaced star, Maltese cross.

PROCEDURE:

The Rutgers Drawing Test is given ordinarily as an individual test although it may be used with small groups of children already familiar with each other. The child is supplied with a soft lead pencil of suitable length for him to handle readily. Colored pencils add to the child's interest in marking. The broad line of a soft lead pencil or the colored pencil is rewarding to the child's effort, especially when he is not too familiar with pencils or has had restrictions in their use. A wax crayon's mark is too broad to show angles or intersection of lines. Some children show fear or doubt when faced with a directed "use-the-pencil" situation. But, with encouragement "to make one like this", they frequently show a glow of tension-release and obviously enjoy the experience.

In presenting the drawing paper, it should be folded along the midline. The whole sheet presents too large a field of attention for young children. Seeing the more complicated figures might also distract their efforts, especially in the case of a timid perfectionist.

There is no time limit for the test. Our experience shows that about five minutes are required for the average child. Only one copy of each drawing is required, but if the child spontaneously

rejects his first attempt and begins again, he is allowed to do so. The completed or the second figure is the one scored. Pointing to the horizontal line in the upper left hand corner of the page, the examiner asks the child "to make one just like this. Make it right here." Then, "Make one like this one standing up. Draw it here .... Now make one like this (pointing to the cross) right here .... Now, draw a picture of each one."

Most children of four understand that their drawing is to be placed just below the figure and they go on without further directions. When they have finished the first two rows, the examiner turns the paper over revealing the last two rows saying, "Now do these." Some children look for repeated directions as they finish each drawing. Others have an urge to draw any place on the paper. To these it is usually sufficient to point to the next figure and then to the space beneath saying "Here".

When a child does not draw either of the first lines, they are demonstrated. If he still does not copy them, the examiner takes the child's hand and together they draw each slowly and deliberately. Children are encouraged to do their best with some praise for effort, particularly at the beginning. If a child protests "I can't do this one," or "This is too hard," he is encouraged to try but is not forced. If it is obvious that his interest has lagged too much, the incomplete paper should be removed. This simple and informal procedure has been found to establish rapport easily. The drawing affords a release of activity, a "doing something," which frequently establishes confidence enough to carry on through the verbal responses of later testing.

Aside from the use of such geometric designs in intelligence tests, there have been developed other test uses of drawing whose results throw considerable light upon the qualitative aspects of simple copying. Goodenough (5) set up a scale for measuring intelligence based on the drawing of a man and held it to be reliably indicative. In 1938 Lauretta Bender (1), using nine of Wertheimer's designs, put together the Visual Motor Gestalt Test, commonly known as the Bender-Gestalt (9), to be used with "children to explore retardation, regression, loss of function and organic brain defect .... and to explore personality deviations, especially where there are regression phenomena." The more recent developments in the use of drawings have not been copying, but rather original free expression as house,

tree, man (3), and self-portrait. The emphasis here has been upon personality and stress revelation although the degree of completeness and perfection undoubtedly reflect ability also.

With experience, clinicians have come to appreciate the diagnostic value of negative responses, as well as the expected ones. Just watching a child face the problem of drawing may give greater insight and raise more pertinent questions because of his failure than his successes. Sometimes we can see how he has analyzed the form and how he reassembles it. When he fails, the question of "why?" needs to be answered. Are there reversals, do they occur in the other tests also? Is there the suggestion of faulty vision? Is he evading? Is he strongly inhibited? Whether he succeeds or not, we can observe how he attacks the problem .... with confidence, methodically, impetuously, slowly, over-cautiously, evading the directions, assuming a dictatorial aggression.

If the suggestion of giving the drawing test early in the examination is followed, much clinical evidence is readily available.

## SCORING AND STANDARDIZATION

Several attempts have been made to arrive at a satisfactory method of scoring. It is obvious that at least three levels of credit should be assigned since the children, being young, would be in a state of growth toward higher levels of efficiency. Stevens (11) scored the figures using 0 for failure, 1 as partial credit, and 2 for success. This method provided for a range from 0 to the maximum of 28 points and on the whole has proved to be satisfactory up to the 6.5 year group. Because the growth appears regular in each six month period from 4 through 6 years, it was questioned whether the same pattern in growth sequence would follow at the ages of seven and beyond. Relatively few children under seven attained the maximum score.

A further study was made of 277 normal children within the age range of 3 to 6, who had had individual examinations at the Rutgers Clinic. A comparison of their MA scores on Binet and the MA of the Drawing Test showed a product-moment correlation of .72 P. E., .019. Goodenough (5) reported r = .74 between Binet and her Draw-A-Man test. An additional study was made at Rutgers of 57 cases of mentally deficient children under 12 years of age, with

no I. Q. over 60. The correlation between their Binet and Drawing scores was .61, P. E., .05. This further supports the validity of the findings with the 4 to 6 year group.

A group of younger children who had full psychological examinations was studied. Those under two years could only scribble. The drawings of children up to 3.5 yrs. yielded a median score of 1 with the upper quartile between 2 and 3 points. Between 3.5 and 4 yrs., the median tended to rise, but was not consistent enough to present positive findings. Apparently the Rutgers Drawing Test is too difficult for the average child of less than four years. At one point, in working with scoring, we were interested to know the effect of practice by young children. Several children of the 3 to 4 year group were given the test every day for a week. Their initial score was scarcely altered.

The matter of scoring adjustment through a bonus value for a series of full credits was considered. The range was increased but not discriminatively enough to justify the more complicated scoring. Still another attempt was made to determine the possible limits of scoring by doubling the values assigned to drawings chiefly on excellence and quality; 1516 cases were re-scored. The range of the middle half of the scores at each age level became too broad to be definitely discriminating or overlapped with the succeeding age groups. This method of scoring was discarded and we were forced to accept the limitations of the test, the four to seven year levels. Failure above that level may be highly significant.

In scoring the drawings, the angles were the first consideration, i.e., to receive full credit on the square, a child must make the angles approximately right angles, and on the diamond test, he must make the opposite angles approximately equal. These standards are in agreement with the scoring of these figures by other investigators.

The next important consideration was the equality of lines; for instance, the sides of the square must be approximately equal and parallel and the two upper and the two lower sides of the diamond must be approximately equal. Also the firmness and straightness of the lines was another criterion in judging the value of the copy. In any figure incompletely drawn, 1 point is given if at least half the design is presented and it is of good quality.

The scoring standards for this test are much more severe for the easier figures than those that have been adopted by Gesell (4), Terman-Merrill (13 pp 201-202), and Stutsman (12). For instance, in scoring the circle test, Stutsman allows credit for any result that shows that the child is making a closed circular figure. The line may be very irregular, have many angles in it, and the design may be oval or oblong. This type of response, given passing credit by Stutsman, would receive partial credit on the Rutgers Test. The same is true of the upright cross and the star.

Gesell states that the scoring of the results of the drawing tests for the very young children should be more lenient than for the older ones. This is contrary to the Rutgers scoring since a single standard was used throughout. Gesell gives credit on the cross regardless of the angles, but instructs the examiner to note whether the child can copy an oblique cross which represents a more difficult problem than the upright cross. An individual receiving full credit for the oblique cross in the Terman-Merrill scale might receive only partial credit on the Rutgers Test. Yerkes, Bridges, and Hardwick in the "Point Scale" (14) give full credit on the square when both angles and lines are approximately equal, and partial credit for the equality of one or the other, but no both. On the diamond they give full credit when both pairs of opposite angles are equal, and partial credit when only one pair are equal.

The derivation of the scoring norms is given in Table II. Column 7 gives the "drawing ages", in months, that should be assigned to each particular score which might be made by a child. Although there has been no standardization of the test on children of seven years and older, our practice is to give a drawing age of 84 months for a score of 24 and to add two months "drawing age" for each additional score point. Thus a maximum score of 28 gives a drawing age of 92 months.

DISCUSSION:

A study of children's drawings may lead in several directions since questions arise concerning the development of perception, motor coordination, and their interdependence in executing a drawing. Then comes the question of spontaneous drawing to portray meaning as against the copying of simple geometric figures, which as stimuli are probably as free from association as are digits. The early interest

## TABLE II

### DERIVATION OF SCORING NORMS
For Rutgers Drawing Test

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Chronological Age Yrs. - Mo. | Months | No. Cases | Total Score Range | Interquartile Range | Median | Equivalent Drawing Age In Months |
| IV- 0 | 48 | 38 | 0-19 | 1- 6 | 2 | 48 |
| IV- 1 | 49 | 12 | 0- 9 | 3- 5 | 3 | 49 |
| IV- 2 | 50 | 27 | 0-20 | 3- 8 | 4 | 50.5 |
| IV- 3 | 51 | 21 | 1-15 | 2- 6 | 4 | |
| IV- 4 | 52 | 23 | 2-17 | 3- 6 | 5 | 52 |
| IV- 5 | 53 | 32 | 1-14 | 3- 6 | 6 | 53 |
| IV- 6 | 54 | 37 | 2-26 | 4- 7 | 7 | 54 |
| IV- 7 | 55 | 32 | 0-24 | 4- 9 | 8 | 55.5 |
| IV- 8 | 56 | 30 | 1-19 | 8-14 | 8 | |
| IV- 9 | 57 | 25 | 3-22 | 5-11 | 9 | 57.5 |
| IV-10 | 58 | 34 | 1-24 | 5-11 | 9 | |
| IV-11 | 59 | 40 | 3-24 | 8-15 | 10 | 59 |
| V- 0 | 60 | 73 | 3-24 | 6-14 | 11 | 60 |
| V- 1 | 61 | 48 | 3-23 | 8-13 | 12 | 61.5 |
| V- 2 | 62 | 47 | 4-27 | 8-14 | 12 | |
| V- 3 | 63 | 52 | 5-24 | 8-16 | 13 | 63 |
| V- 4 | 64 | 51 | 5-25 | 10-17 | 14 | 64.5 |
| V- 5 | 65 | 65 | 5-27 | 10-20 | 14 | |
| V- 6 | 66 | 65 | 5-28 | 10-18 | 15 | 66.5 |
| V- 7 | 67 | 61 | 6-27 | 13-19 | 15 | |
| V- 8 | 68 | 46 | 7-28 | 11-21 | 16 | 68.5 |
| V- 9 | 69 | 58 | 6-28 | 12-17 | 16 | |
| V-10 | 70 | 49 | 7-28 | 14-21 | 17 | 70.5 |
| V-11 | 71 | 50 | 9-27 | 14-22 | 17 | |
| VI- 0 | 72 | 66 | 6-28 | 12-22 | 18 | 72.5 |
| VI- 1 | 73 | 49 | 7-28 | 13-21 | 18 | |
| VI- 2 | 74 | 39 | 8-28 | 15-24 | 19 | 74.5 |
| VI- 3 | 75 | 40 | 8-27 | 14-23 | 19 | |
| VI- 4 | 76 | 45 | 9-28 | 20-23 | 20 | 76.5 |
| VI- 5 | 77 | 39 | 10-28 | 16-23 | 20 | |
| VI- 6 | 78 | 29 | 10-27 | 14-22 | 21 | 78.5 |
| VI- 7 | 79 | 29 | 10-28 | 14-22 | 21 | |
| VI- 8 | 80 | 25 | 10-27 | 17-23 | 22 | 80.5 |
| VI- 9 | 81 | 21 | 12-26 | 18-22 | 22 | |
| VI-10 | 82 | 28 | 12-28 | 19-24 | 23 | 82.5 |
| VI-11 | 83 | 17 | 14-28 | 18-25 | 23 | |

in developing this test stemmed from a need to supplement the verbal tests in examining preschool children. Non-verbal children have always offered a challenge to the examiner and an objectively scored drawing test with a minimum of content-meaning suggested a possible medium. The talkative, chatty child frequently is overrated because of his easy flowing conversation. A task of expressing oneself inaudibly through drawing might well temper the exaggerated score in words. We recognized also that, along with developing such a possible test, we were exploring the developmental sequence of a child's reproduction of lines, arcs and angles, untaught, and meeting them as a new problem in various combinations and designs. However, the initial and prime interest was to develop a clinical tool of reliable diagnostic value. We thought of it in terms of measuring intelligence as indicated by the success of copying the figures presented. If such a scale would emerge, it should be of value in the study of older mentally defective cases, with mutes, with frustrated children, as well as non-English speaking youngsters or those from foreign homes.

As the test developed, however, we became increasingly aware of its value in providing an opportunity to observe the qualitative aspects of the child's response, as well as the drawing to be scored. When the child begins, you see him in action. He is on his own, meeting a problem with whatever facilities he may have. You see how he holds the pencil, how he begins to work, eager, timid, quick, cautious. The time factor shows his pace and as he proceeds one observes if it is steady, spotty, and how quickly it diminishes or gains. He shows where doubt begins to come, at which point frustration overtakes him, and perhaps more important, how he meets the threat of that frustration. Does he just stop, as if he would offend his own dignity if he did an inferior piece of work, or in seeming defiance boldly draw at random?

In a half dozen children of the same age and general ability, obtaining the same score, there may well be at least half a dozen patterns of clinical significance. The conversationalist readily keeps up a steady chatter about the lines: "and then one here and the next one down." Here we may have a verbal record of the form analysis, with evidence of how concentrated the attention is. Another child equally talkative may keep on saying softly, "did my mother go, did my mother go," and the execution of the drawing is done with less than full atten-

tion. If the marks themselves are dainty, frail and not too steady, do they seem to match the rest of the child's reaction? Such lines drawn by a robust, energetic boy would raise questions which differ from those suggested by an undernourished or overprotected one.

The Rutgers Drawing Test affords opportunity to observe whether the successes are steady and completed at a point, or whether partial scores extend the range yet yield the same score. Does this reflect typical behavior patterns? The child who approaches the examination with doubt needs to be encouraged. Sometimes being allowed to choose the color pencil is just enough of flattery to increase his self-confidence, and he goes ahead. Is this need of reassurance a habit, a bid for power or the evidence of a lonely child? Such children may show their concern in talking to themselves, "I can't, is this right—is that wrong, I wish . . . ." and yet, with persistence, they do achieve a score. Excessive or auxiliary behavior is not always shown through speech. Sometimes children add extra arms in an effort "to make it better" and thereby so change the design that it becomes something entirely different. This is one way of "erasing" a failure. Was this immaturity, protest against conformity, lack of attention or flighty imagination? The score may not be of diagnostic significance, but the clues for the clinician are highly individual.

On occasion a child will repeat his last successful drawing over and over instead of attempting the more difficult ones. The control of the situation remains in the child's self-direction, whether he avoids failure by filling up the spaces as he chooses, or just enjoys a partial defiance against the direction given. The pleasure of conscious power is unmistakable.

Another attempt in avoiding failure and enjoying self-direction is seen in the child who "samples" one drawing after another in sequence or skips from one to another, never finishing any. He may draw an angle here, a curve there, and arrange a few detached lines beneath another figure. Sometimes he returns to finish the first ones. These children appear hyper-excited and show little criticism of their effort. Sometimes a second drawing page was given to this type of child with the direction "Let us make just this one." The other figures should be covered so only one is in view. The reaction varies. Sometimes the figures are fairly well drawn until they become too difficult,

or continuance of the test is rejected as soon as restriction is imposed. In this test, as in many others, the type of failure or its accompanying behavior is clearer in its implications than "uneventful successes."

SUMMARY:

The Rutgers Drawing Test has been presented with norms for use in the study and examination of young children. While such norms are expressed in terms of the age at which average children are found able to copy the series of geometric figures, the value of the test is not limited to such scores. It has particular value in revealing types of reaction indicative of personality characteristics.

## APPENDIX

In the Appendix, which follows, is given a facsimile of the test protocol and then a series of scoring samples for each figure.

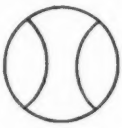
# RUTGERS DRAWING TEST

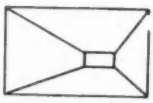
No

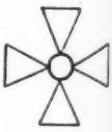
NAME DATE

AGE GRADE

SCHOOL RATING 1 2 3 4 5







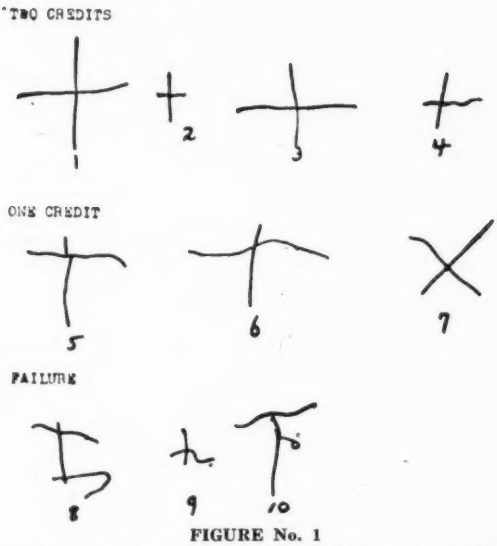



**FIGURE No. 1**

Full credit—2 points—is given when both arms are of approximately equal length; are at right angles to each other; and bisect each other approximately. All lines must be firm and straight.

Half credit—1 point—is given when figure resembles model, but when lines are not straight and when horizontal arm does not bisect vertical arm, but is above or below the midpoint of the vertical arm. Angles must be approximately right angles. If figure resembles Figure 5, it is given one point credit.

---

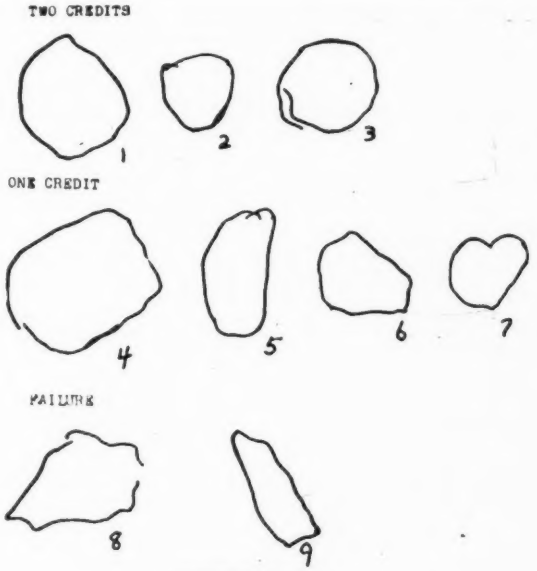



**FIGURE No. 2**

Full credit—2 points—figure must be approximately round, have no angles; and lines must meet approximately at one point.

Half credit—1 point—figure may not be round, it may be oval, etc,, and it may contain some angles.

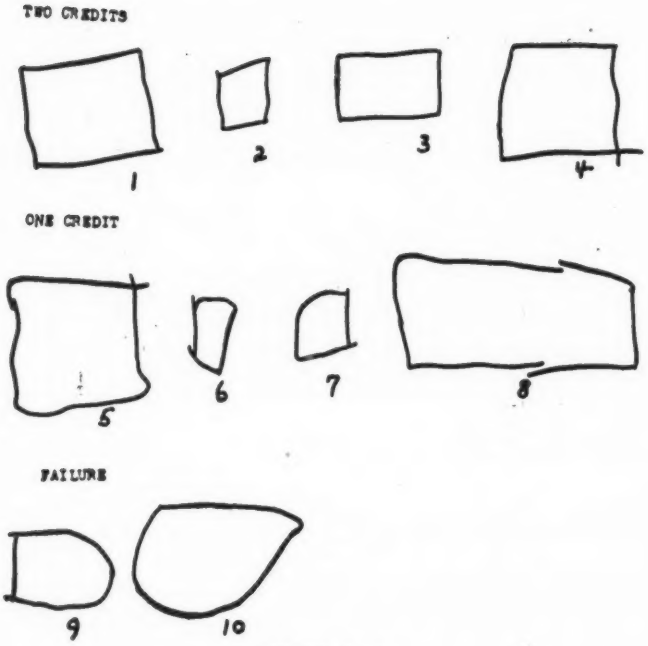



**FIGURE No. 3**

Full credit—2 points—angles must be right angles; sides of figures must be approximately equal and parallel; and lines must be straight.

Half credit—1 point—angles must be approximately right angles; sides may be unequal in length and lines may be somewhat irregular.

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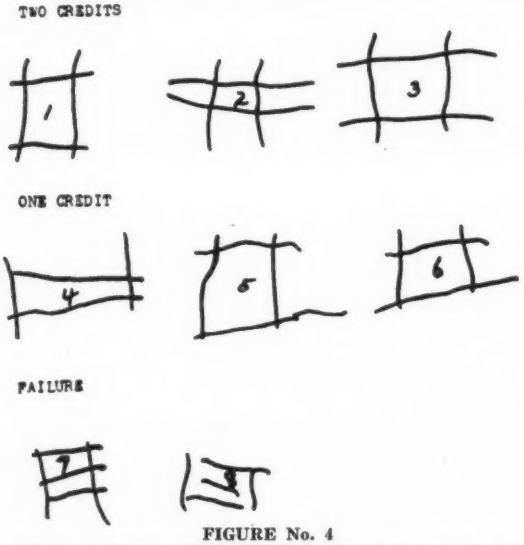


**FIGURE No. 4**

Full credit—2 points—angles must be approximately right angles; vertical and horizontal arms must be straight and approximately parallel; horizontal arms must extend beyond vertical arms and vice versa.

Half credit—1 point—angles must be approximately right angles; lines need not be continuous or straight but must be approximately parallel; all arms need not extend beyond opposite arms as is required to receive full credit.

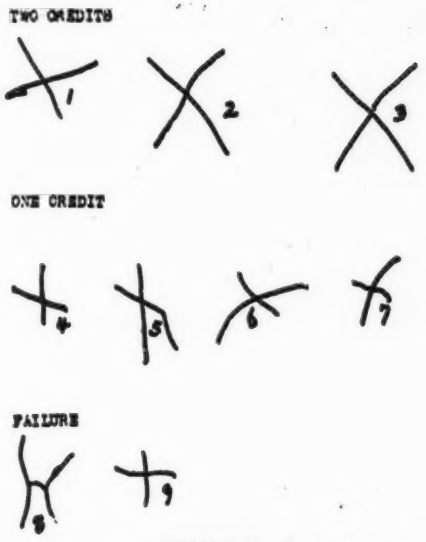


**FIGURE No. 5**

Full credit—2 points—figure must resemble model, that is, arms must be at oblique angle to horizontal lines on test paper; opposite angles must be approximately equal; and lines must be firm and straight.

Half credit—1 point—figure must still be an oblique cross but one line may be curved or both lines may be irregular. If figure is half-way between Figure 1 and Figure 5, the subject is given the benefit of the doubt and receives one point credit, (see Sample 4).

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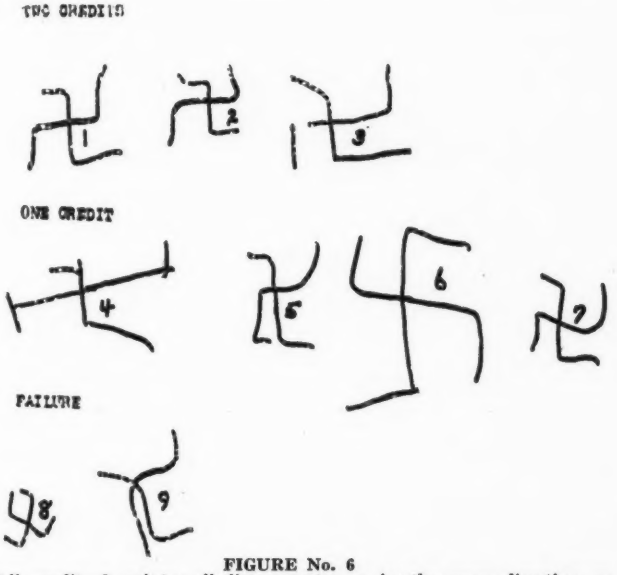


**FIGURE No. 6**

Full credit—2 points—all lines must run in the same direction as the model; angles must be approximately right angles; lines must be continuous or meet at points as in the model; and long horizontal and vertical lines must approximately bisect each other and parallel each other.

Half credit—1 point—angles need not all be right angles, some corners may be round (see Sample 5); lines need not be parallel or equidistant; and lines need not be straight or meet at one point (see Sample 4). One or two extra lines may be allowed provided they do not alter the resemblance to the model (see Sample 5).

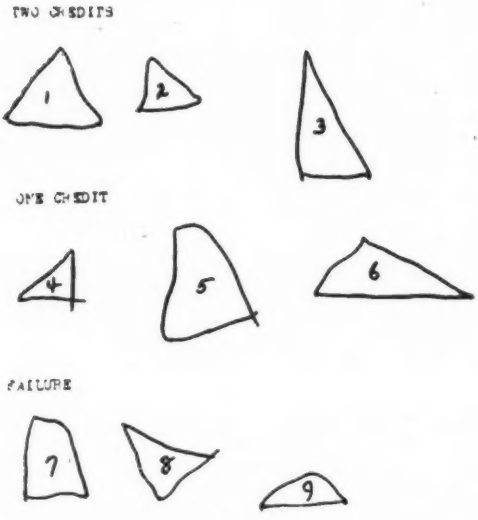


**FIGURE No. 7**

Full credit—2 points—lines must be straight; sides must be equal but may be somewhat longer than the base; and base must be parallel to horizontal lines on test paper.

Half credit—1 point—lines may be somewhat irregular; sides need not be equal; one angle may be a right angle (see Sample 4), or one angle may be somewhat rounded (see Sample 5).

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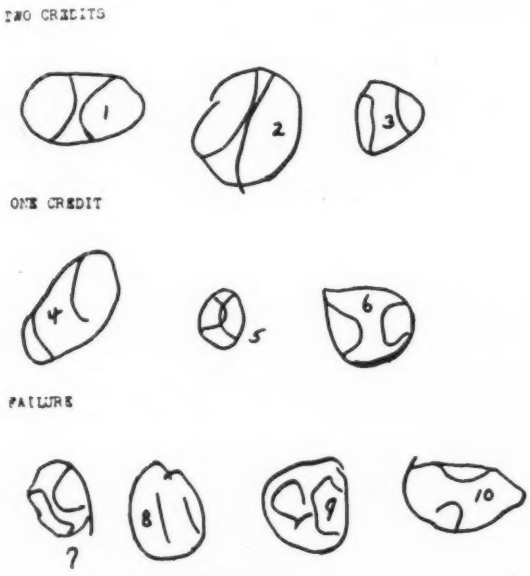


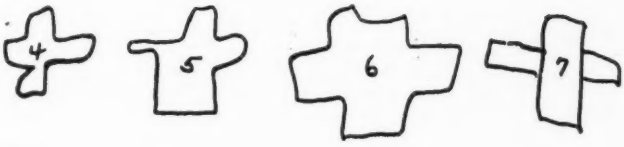

**FIGURE No. 8**

Full credit—2 points—circle must meet requirements of Figure 2 (full credit); arcs must meet circumference of circle and must lie in approximate position of model.

Half credit—1 point—circle must meet requirements of Figure 2 (half credit); arcs need not meet circumference of circle, one may be a straight line, they may interlock, or they may not be in exactly the same position as in the model but figure must resemble model (compare Samples 4 and 10).

TWO CREDITS

ONE CREDIT




FAILURE

**FIGURE No. 9**

Full credit—2 points—angles must be approximately right angles; arms must be approximately equal and opposite arms must be approximately parallel; and lines must be firm and regular.

Half credit—1 point—opposite arms need not be equal but must be approximately parallel; lines need not be regular and may cross each other, thus making squares of the arms (see Sample 7).

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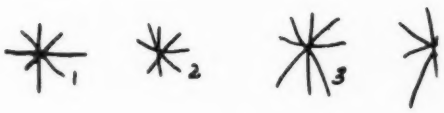
TWO CREDITS




ONE CREDIT

FAILURE

**FIGURE No. 10**

Full credit—2 points—figure must contain the same number of lines as the model (it must be an eight-pointed star); lines of the simple right-angle cross must be approximately equal and must approximately bisect each other.

Half credit—1 point—one line may be omitted from the figure, or one line may be added; figure need not contain two lines that bisect each other but in this case there must be seven or eight points (see Sample 5).

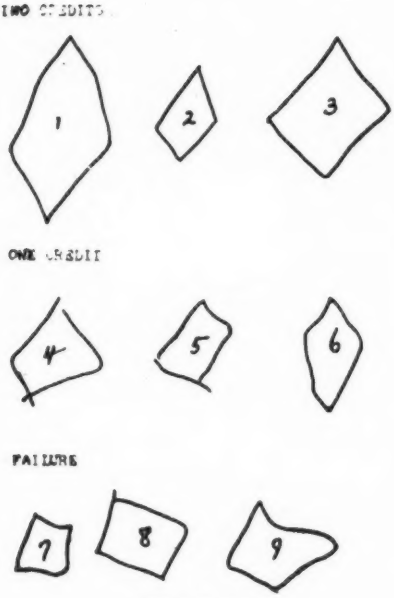



**FIGURE No. 11**

Full credit—2 points—figure must be drawn in the approximate position of the model, the angles must be approximately opposite each other, and upper sides of figures must be approximately equal as must the lower sides.

Half credit—1 point—figure must be distinguishable from a square—it must be in approximate position of the model; one set of angles may not be opposite each other; and upper and lower sides of figure may not be equal.

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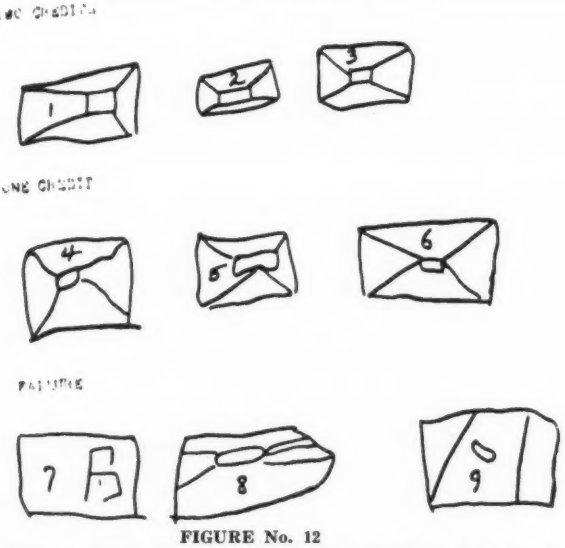


**FIGURE No. 12**

Full credit—2 points—figure must resemble model so that no part is omitted or no extra lines added. Inner rectangle must be off center. "Rays" must approximately run from the corners of the inner rectangle to the corners of the outer rectangle.

Half credit—1 point—essential parts of the design must be present but may be misplaced but not seriously, that is "rays" may not run between correct corners but no lines should cross each other.

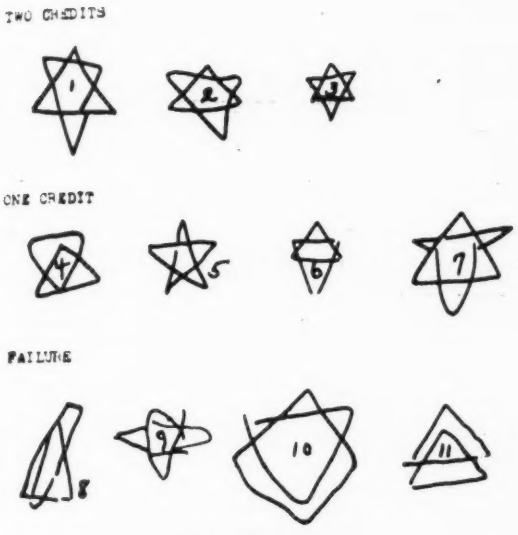


**FIGURE No. 13**

Full credit—2 points—figure must be in approximate position of the model; triangles must be placed in relation to each other as in the model; angles must be approximately equal.

Half credit—1 point—triangles need not be in exactly the same position as the model, but they must be reversed, that is, the bases must be parallel. A five pointed star (see Sample 5) is given 1 point credit.

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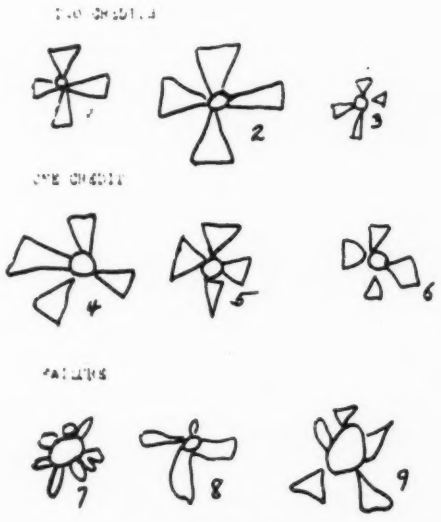


**FIGURE No. 14**

Full credit—2 points—figure must be in the approximate position of the model, that is, the **triangles** must be placed evenly about the circle and **points** of the triangle must meet the circle.

Half credit—1 point—all of the triangles need not be placed evenly about the circle; however, they must be present in the correct number (4). If the base of a triangle meets the circle, figure is given one point credit.

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# YOUNG PENTAGON OFFICIAL IS "VINELAND DAY" SPEAKER

EDWARD T. DICKINSON
of Washington, D. C.

Vice Chairman of the
NATIONAL SECURITY RESOURCES BOARD

Mr. Dickinson, a young man whose recognized abilities have been widely used by our nation's leaders during the past 10 years, will be the principal speaker at this year's "Vineland Day" at The Training School, Vineland, N. J., on Tuesday, May 27. This annual all-day event is sponsored by the New Jersey State Federation of Women's Clubs.

A graduate of Yale University in 1932, Mr. Dickinson is a former research assistant to the Chairman of the United States Steel Corporation. He served notably in World War II as director of industrial sabotage operations in the European theatre. At the request of Donald Nelson, head of the War Production Board, he also assisted in coordinating British and American war production efforts. After the war, he was called to ECA as a director of the Marshall Plan and spent many months in Asia as well as in European countries.

Upon the outbreak of war in Korea, Mr. Dickinson was assigned by the Secretary of Defense to serve as special assistant to the Secretaries of the Army, Navy and Air Force. He spent much of his time last year in expediting the development and construction of scores of U. S. air bases throughout the world. Late in 1951 he was named vice chairman of the National Security Resources Board, in the Executive Office of the President of the United States.

Mr. Dickinson has long been interested in the work at The Training School. His talk, therefore, will come from one who is familiar with the Vineland school and is vitally interested in its programs and activities.

## FRANK G. MERITHEW HONORED AT MENANTICO COLONY PROGRAM

High tribute to Frank G. Merithew for "38 years of unfailing courage, hard work, and loyalty" as manager of the Menantico Farm Colony of The Training School at Vineland, N. J., was paid by friends, associates, and boys of the Colony at a special program at the farm's chapel on Sunday, March 30, at 2: p. m.

The occasion was the presentation of a commemorative picture of Mr. Merithew to the boys of the colony where he served as manager from 1913 to 1951. The picture will hang permanently in the chapel.

Dr. Lloyd N. Yepsen, director of the Division of Classification and Education, New Jersey Department of Institutions and Agencies, was the principal speaker. Dr. Walter Jacob, director of The Training School, C. Emerson Nash, superintendent, Mrs. Alice Morrison Nash, director of education, the Rev. Calvin Felton, pastor of the Pilgrim Congregational Church of Vineland, and the Rev. Lawrence G. Atkinson, pastor of the First Methodist Church of Vineland participated in the program. Dr. James S. Wittman, Jr., present manager of the colony, presided.

Guests from many parts of New Jersey and neighboring states gathered in the flower-banked chapel to honor Mr. Merithew and his wife, Mrs. Christine Wolfe Merithew, who now live in Vineland following Mr. Merithew's retirement last year.

Recalling the early days of the colony when Director Edward R. Johnstone, Dr. Henry H. Goddard, "Captain" Ted Nash, and Mr. Merithew were directing the school's program, Dr. Yepsen said: "Their idea was to build a colony and build boys and men at the same time. It became a place of happiness and industry, mainly through the efforts of Frank G. Merithew whom we and the boys here always called 'The Boss'."

FRANK G. MERITHEW HONORED

C. Emerson (Ted) Nash presents portrait of Mr. Merithew, retired manager of Menantico Colony, to the boys enrolled there. On the program, March 30, 1952 were: Rev. Calvin J. Felton, Mrs. C. Emerson Nash, Dr. Lloyd N. Yepsen, Mr. Nash, Mrs. Frank G. Merithew and Mr. Merithew, Ramond K., Dr. Walter Jacob, Dr. James S. Wittman, Jr., present manager and Rev. Lawrence G. Atkinson.

Mr. Merithew first came to The Training School on December 12, 1912, as a teacher, Dr. Yepsen stated. Born in St. Lawrence County, New York, he had attended Potsdam Normal School, New York, and had roomed with C. Emerson ("Ted") Nash who joined the staff of The Training School on September 10, 1898. Mr. Merithew, following his graduation, taught school for the next decade at Bordentown Military Institute, at Netcong high school, and at the Trinity Corporation School in New York City.

In the fall of 1912, he met Professor Johnstone and Mr. Nash in Philadelphia and they discussed plans for the Menantico Colony "until the wee small hours." Later they were aided in their plans by Bleeker Van Wagenen, a member of the board of trustees. Thus it came about that the school purchased 534 acres of land on May 5, 1913 in the Hance Bridge area, east of Vineland. That acreage has now increased to 1400.

Merithew, with three boys, went to work clearing the scrub pine and stumps from the land and erecting knockdown buildings, which came in 8-foot sections known as "Come-Packed" buildings. They spent their first night in the initial building, a one-story dormitory, on July 13, 1913. Later more boys came and 24 spent the first winter there. Baths were taken in tin tubs with water heated in a huge iron kettle outside.

One of this first crew of three boys is still at the colony, Irving H., and stood up in the audience Sunday when Dr. Yepsen called his name.

In 1915 Training School carpenters, with the aid of the boys, built the first permanent buildings—the large Bleeker Van Wagenen cottage and a hobby shop. Cement blocks, 2 feet by 8 inches, were made on the grounds for the construction of these buildings. The present office building followed in 1916 and Mr. Merithew lived there a year prior to his marriage to Miss Christine Wolfe on June 16, 1917. His wife had been on the staff of The Training School since January, 1912, coming to Vineland from Mercersburg, Pennsylvania.

Dr. Yepsen, who himself is a former member of The Training School research staff, told of the year-by-year expansion of farm crops, fruit growing and livestock, including a pure-bred dairy herd. He

told of the work with the agricultural experiment station of Rutgers University.

"This colony is a monument to a man's work," he said. "Frank Merithew stepped into all kinds of situations and always seemed to come out on top. We need men who are willing to work like he did for there is a new upsweep of interest in this field now, sparked by many new parents groups over the nation, new special education classes, new legislation. My best to 'The Boss' and his wife, 'Chris'. Their work will always be with us."

Dr. James S. Wittman, Jr., who has been manager of the colony since Mr. Merithew's retirement last year, read congratulatory letters and other communications which he had received concerning the Merithews. He introduced Dr. Walter Jacob, director of The Training School, who welcomed the guests to another memorable meeting of "The Training School family." He paid warm tribute to the long years of service by the Merithews and expressed the wish that "the sun will shine over their future years just as it is doing today."

The boys of the colony, accompanied by Miss Nellie Starkey, sang several numbers and two of them played "In The Garden" as an harmonica duet.

Mrs. Alice Morrison Nash, in an excellent brief talk, said: "How well I remember that first victorious day when the first acres were cleared for planting and the first buildings were up. But look at our colony now. If you would see a monument, look around you."

C. Emerson Nash, lifelong friend of Mr. Merithew, presented the handsomely framed large picture of Mr. Merithew which will hang permanently in the chapel. It was received and put in place at the right side of the rostrum by Raymond K., who extended thanks to Mr. Nash in behalf of all the boys.

Mrs. Merithew was called to the front of the chapel by Dr. Wittman and was presented with a huge bouquet of yellow roses by Henry K., in honor of her long years of work with "her boys." She replied briefly, telling about the early years at the colony and of the deep appreciation felt by her husband and herself for the day's program and the many guests who attended.

Mr. Merithew himself, following the presentation of his picture to the boys, came to the center of the rostrum to receive a rising ovation from the entire audience. He spoke very briefly, saying: "None of this could have happened without the help of many people. I've always enjoyed working with young people—first as a teacher and then at Menantico Colony—and maybe that's why we were able to do what we did. It was the working together, pulling together—like one big family." He praised the service of his co-workers Angelo Perri, Mrs. Lavinia Schmidt, and others who helped through the years and the encouragement he always received from Professor Johnstone, Mr. and Mrs. Nash, and other staff members in later years.

The program which opened with an invocation by Reverend Felton was closed with a short prayer by Reverend Atkinson. For nearly an hour afterwards, friends of the honored guests remained to talk over "old times" with Mr. and Mrs. Merithew.